

## **BUS 735: Business Decision Making and Research**

**Instructor: Dr. James Murray**

**Fall 2010**

### **Homework #1**

1. SAB, pages 18-19, Practical Exercise Part I (all parts)
2. SAB, pages 19-20, Practical Exercise Part II (all parts)
3. The director of training for an electronic equipment manufacturer is interested in determining whether different training methods have an effect on the productivity of assembly line employees. She randomly assigns 42 recently hired employees into two groups of 21. The first group (Training=0) receives a computer-assisted, individual-based training program and the second group (Training=1) receives a face-to-face team-based training program.

Upon completion of the training programs the employees are evaluated on the time (in seconds) it takes to assemble a part. After one month, each employee is also given a questionnaire with a single question, "How confident are you in your ability to perform your assembly line duties? Select one (Not Confident [1] / Somewhat Confident [2] / Very Confident [3]). The data for these variables is given in *training.xls* on the class website.

- (a) Is there evidence that one training program is more effective than the other in terms of time to assemble a part? Be sure to state your hypotheses, what tests you decide to run, report your p-value and report in plain English a description of your result.
- (b) Is there evidence that one training program leads to greater confidence in employees' abilities to perform their job? As always, state your hypotheses, what tests you decide to run, report your p-value and report in plain English a description of your result.